

Message Text

LIMITED OFFICIAL USE

PAGE 01 LONDON 00791 01 OF 02 171847Z

45

ACTION EB-11

INFO OCT-01 EUR-25 EA-11 ISO-00 SPC-03 AID-20 NSC-10

RSC-01 CIEP-02 TRSE-00 SS-20 STR-08 OMB-01 CEA-02

CIAE-00 COME-00 FRB-02 INR-10 NSAE-00 XMB-07 OPIC-12

LAB-06 SIL-01 FEA-02 INT-08 SCI-06 AEC-11 AECE-00

ACDA-19 DRC-01 FPC-01 /201 W
----- 003508

P R 171834Z JAN 74

FM AMEMBASSY LONDON

TO SECSTATE WASHDC PRIORITY 7184

INFO AMEMBASSY PARIS

AMEMBASSY ROME

AMEMBASSY TOKYO

USMISSION EC BRUSSELS

USMISSION OECD PARIS

LIMITED OFFICIAL USE SECTION 01 OF 02 LONDON 00791

STATE ALSO FOR T/IEP

E.O. 11652: N/A

TAGS: ENRG, UK

SUBJECT: ENERGY: ALTERNATE ENERGY SOURCES

REF: STATE 6596

INTRODUCTION: UNTIL OCTOBER 1973 BRITAIN RELIED ON
IMPORTS OF 100 MILLION TONS (2 M/BD) OF IMPORTED OPEC
OIL TO SATISFY APPROXIMATELY 48 PER CENT OF ITS TOTAL
ENERGY NEEDS. ANNUAL DOMESTIC COAL PRODUCTION OF *20
MILLION TONS ACCOUNTED FOR ABOUT 35 PER CENT OF TOTAL
ENERGY NEEDS. NORTH SEA NATURAL GAS PRODUCTION OF SOME
950,000 MILLION CUBIC FEET SATISFIED 12 PER CENT OF
ENERGY REQUIREMENTS. NUCLEAR POWER GENERATION ACCOUNTED
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 LONDON 00791 01 OF 02 171847Z

FOR ABOUT 4 PER CENT AND HYDRO-ELECTRIC POWER FOR LESS

THAN 1 PER CENT OF TOTAL ENERGY NEEDS. BY 1980 ENERGY REQUIREMENTS ARE EXPECTED TO INCREASE BY ABOUT 50 PER CENT TO 6 M/BD, AND TO BE MET AS FOLLOWS: OIL 50 PER CENT (OF WHICH 80 PER CENT FROM UK SECTOR OF NORTH SEA, LEAVING UK DEPENDENT ON IMPORTED OIL FOR 10 PER CENT OF TOTAL ENERGY REQUIREMENTS); COAL 25-30 PER CENT (DEPENDING ON COST OF DOMESTIC PRODUCTION AND DEVELOPMENT OF NUCLEAR POWER); GAS 15 PER CENT, NUCLEAR 10 PER CENT; OTHER, LESS THAN 1 PER CENT. BY 1985, UK WILL PROBABLY BE SELF SUFFICIENT IN OIL AND GAS (ASSUMING CONTINUATION OF PRESENT TREND IN NEW NORTH SEA OIL DISCOVERIES THROUGH 1980). COAL PRODUCTION WILL DEPEND INCREASINGLY ON GROWTH OF NUCLEAR POWER. BY 1985, ENTIRE ELECTRICITY BASE LOAD WILL PROBABLY BE MET BY NUCLEAR POWER. UNDER THESE CIRCUMSTANCES, UK IS ONLY MODERATELY INTERESTED IN DEVELOPING OTHER ALTERNATE ENERGY SOURCES.

1. EMBASSY ASSESSMENT OF UK POTENTIAL FOR DEVELOPING ALTERNATE ENERGY SOURCES OTHER THAN FROM OPEC COUNTRIES IS BASED ON COMPOSITE BEST-GUESS ESTIMATES OF VARIOUS INDUSTRY, GOVERNMENT AND ACADEMIC EXPERTS. GIVEN THEIR BRIGHT MEDIUM AND LONG TERM PROSPECTS FOR NORTH SEA OIL AND GAS, TOGETHER WITH RELATIVELY ABUNDANT COAL RESERVES, BRITISH HAVE BEEN LAGGARD IN STUDYING COSTS AND PRICES OF TECHNICALLY FEASIBLE ALTERNATIVE ENERGY SUPPLIES. UK THINKING HAS BEEN CONFINED IN RECENT YEARS LARGELY TO CONTEMPLATING TRADE-OFFS AMONG COSTS AND BENEFITS OF DOMESTIC OIL, GAS AND COAL PRODUCTION VIS A VIS NUCLEAR ENERGY.

2. NORTH SEA OIL - PRODUCTION SHOULD BEGIN BY EARLY 1975 AND REACH 2.5 M/BD BY 1980 THUS FULFILLING AT LEAST 80 PER CENT OF EXPECTED DOMESTIC CRUDE OR CLOSE TO 50 PER CENT OF TOTAL UK ENERGY REQUIREMENTS. (SEE LONDON A-1410 OF NOVEMBER 30, 1973 FOR DETAILED TIME-TABLE). WHILE SALES PRICE WILL UNDOUBTEDLY BE DETERMINED BY INTERNATIONAL MARKET LEVEL, LANDED COST IN UK SHOULD BE IN \$3.-\$4. A BARREL RANGE. EXPLOITATION OF WHAT UNTIL RECENTLY HAVE BEEN CONSIDERED LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 LONDON 00791 01 OF 02 171847Z

MARGINAL FIELDS MAY BRING LANDED COST UP TO \$5-\$6 A BARREL LEVEL.

LIMITED OFFICIAL USE

NNN

LIMITED OFFICIAL USE

PAGE 01 LONDON 00791 02 OF 02 171859Z

43

ACTION EB-11

INFO OCT-01 EUR-25 EA-11 ISO-00 SPC-03 AID-20 NSC-10

RSC-01 CIEP-02 TRSE-00 SS-20 STR-08 OMB-01 CEA-02

CIAE-00 COME-00 FRB-02 INR-10 NSAE-00 XMB-07 OPIC-12

LAB-06 SIL-01 FEA-02 INT-08 SCI-06 AEC-11 AECE-00

ACDA-19 DRC-01 FPC-01 /201 W
----- 003654

P R 171834Z JAN 74

FM AMEMBASSY LONDON

TO SECSTATE WASHDC PRIORITY 7185

INFO AMEMBASSY PARIS

AMEMBASSY ROME

AMEMBASSY TOKYO

USMISSION EC BRUSSELS

USMISSION OECD PARIS

LIMITED OFFICIAL USE SECTION 02 OF 02 LONDON 00791

3. NORTH SEA GAS - BRITAIN EXPECTS TO BE CLOSE TO OR
AT LEVEL OF SELF-SUFFICIENCY OVER PERIOD OF NEXT TEN
YEARS (ABOUT 15 PER CENT OF TOTAL ENERGY REQUIREMENTS).
DELIVERED OIL EQUIVALENT PRICE OF OFF-PEAK, BULK
QUANTITIES OF NATURAL GAS LIKELY TO BE AS FOLLOWS:

1975 - \$3.50 A BARREL

1980 - \$4-\$5. A BARREL

1985 - \$8-10. A BARREL (REFLECTS

ANTICIPATED CHANGE IN PRICING POLICY

TO ENCOURAGE USE OF OTHER ENERGY SOURCES)

4. COAL - DOMESTIC COAL PRODUCTION IS EXPECTED TO
DECLINE MODESTLY BY 1980-85 (THUS SUPPLYING LESS THAN
CURRENT 35 PER CENT OF TOTAL ENERGY NEEDS). DELIVERED
OIL EQUIVALENT PRICE OF COAL IS NOW AT ABOUT \$5.00 A
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 LONDON 00791 02 OF 02 171859Z

BARREL FOR POWER STATION AND HEAVY INDUSTRIAL USE. ESTIMATES FOR FUTURE ARE HEAVILY DEPENDENT ON PRICING POLICY AND LABOR PRODUCTIVITY IN ADDITION TO INTRODUCTION OF IMPROVED MINING METHODS:

1975 - \$5.50 A BARREL

1980 - \$6. TO \$8. A BARREL

1985 - \$6. TO \$10. A BARREL

5. COAL GASIFICATION OR LIQUEFACTION - BRITISH DO NOT EXPECT TO DO MUCH IN THESE AREAS, EXPECTING MOST ALL COAL MINED WILL CONTINUE TO BE UTILIZED FOR ELECTRIC POWER GENERATION AND HEAVY INDUSTRY. ESTIMATES BASED ON TECHNOLOGY WHICH ALREADY IS OUTMODED ARE AS FOLLOWS:

GASIFICATION - \$12. A BARREL

LIQUEFACTION - UP TO \$22. A BARREL

6. NUCLEAR - BRITISH ARE POISED TO MAKE DECISION ON WHETHER TO SWITCH TO AMERICAN DESIGN LIGHT WATER REACTORS. IN ANY EVENT, NO NEW POWER REACTORS BEYOND FIVE ADVANCED GAS COOLED REACTORS NOW UNDER CONSTRUCTION WILL COME ON LINE BEFORE 1980. ESTIMATES FROM NOW THROUGH 1980 ARE AN OIL EQUIVALENCY PRICE OF \$4. TO \$5. A BARREL. IN PERIOD 1980-85 COSTS MAY INCREASE MARGINALLY DEPENDING ON PROGRESS MADE WITH HIGH TEMPERATURE GAS COOLED AND FAST BREEDER REACTORS.

7. TIDAL - BRITISH HAVE NO PLANS TO EMPLOY TIDAL ENERGY SINCE OIL EQUIVALENCY PRICE ESTIMATED AT \$10. A BARREL. IN ANY EVENT, TIDAL PROJECT WOULD BE SMALL SCALE (ANNUAL EQUIVALENT TO LESS THAN 10 MILLION TONS OF COAL) AND TAKE 5 TO 10 YEARS TO COMPLETE.

8. HYDRO - VERY LIMITED POTENTIAL EXISTS IN BRITAIN, POSSIBLY IN ORDER OF EQUIVALENT TO 1 TO 2 MILLION TONS OF ANNUAL COAL PRODUCTION.

9. SOLAR - THIS IS GENERALLY CONSIDERED IMPRACTICAL FOR LARGE SCALE USE IN BRITISH CLIMATE. EVEN SMALL SCALE CONTRIBUTION FOR WATER HEATING PURPOSES IS DOUBTFUL.

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 LONDON 00791 02 OF 02 171859Z

10. EMBASSY WILL FURNISH DEPARTMENT WITH ADDITIONAL INFORMATION CONCERNING EXISTING OR ON-GOING STUDIES OF INTEREST WHEN AVAILABLE.

SOHM

LIMITED OFFICIAL USE

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 JAN 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: PETROLEUM, ENERGY, IMPORTS, NUCLEAR ENERGY, SUPPLIES, COAL MINING, PRICES
Control Number: n/a
Copy: SINGLE
Draft Date: 17 JAN 1974
Decaption Date: 01 JAN 1960
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Authority: morefirh
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 28 MAY 2004
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1974LONDON00791
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Film Number: n/a
From: LONDON
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1974/newtext/t19740135/aaaabham.tel
Line Count: 223
Locator: TEXT ON-LINE
Office: ACTION EB
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 5
Previous Channel Indicators:
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: STATE 6596
Review Action: RELEASED, APPROVED
Review Authority: morefirh
Review Comment: n/a
Review Content Flags:
Review Date: 28 MAY 2002
Review Event:
Review Exemptions: n/a
Review History: WITHDRAWN <23-Jul-2001 by maustmc, RDFRD>; RELEASED <28 MAY 2002 by morefirh>; APPROVED <28 MAY 2002 by morefirh>
Review Markings:

Declassified/Released
US Department of State
EO Systematic Review
30 JUN 2005

Review Media Identifier:
Review Referrals: n/a
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
Secure: OPEN
Status: NATIVE
Subject: ENERGY: ALTERNATE ENERGY SOURCES
TAGS: ENRG, UK, OPEC
To: STATE
Type: TE
Markings: Declassified/Released US Department of State EO Systematic Review 30 JUN 2005